

SECTION III.—FORECASTS.

FORECASTS AND WARNINGS FOR JULY, 1918.

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[Dated: Weather Bureau, Washington, August 5, 1918.]

GENERAL PRESSURE DISTRIBUTION OVER THE NORTHERN HEMISPHERE EXCEPT EUROPE AND INTERIOR ASIA.

Over the Pacific Ocean pressure was subnormal to a moderate extent, except for a few days over the central portion, and again during the last five days of the month, when it was slightly above normal. A severe typhoon was reported during the first week of the month over the Philippines and the China Sea regions. No details have been received as yet, but the reports from Manila showed barometer readings of 29.68 and 29.53 inches on the 7th and 8th, respectively. Over the Aleutian Islands pressure was also low except during the first week of the month, while over Alaska moderately high pressure prevailed until near the close of the month, except over the extreme southern portion, where pressure averaged slightly below normal.

Over the United States proper there were no marked fluctuations in pressure, and, as a whole, the barometer ruled slightly above normal except on the Atlantic coast, where it was moderately low except during the fourth week of the month.

Over the North Atlantic Ocean pressure was high after the first week of the month, except over the extreme southern portion, where it was about normal.

WARNINGS FOR THE WASHINGTON DISTRICT.

STORM WARNINGS.

There were no marked disturbances during the month except on the morning of the 1st, when a disturbance from the Northwest was central over extreme eastern Lake Superior. Northwest storm warnings were ordered at 9:30 a. m. for Lake Huron and eastern Lake Superior and at Erie, Pa., and Buffalo, N. Y., with instructions to lower them at sunset on Huron and Superior. These warnings were fully verified during the day, Buffalo reporting a wind velocity of 60 miles an hour from the southwest. On the morning of the 31st there was a moderate depression off the Middle Atlantic coast with an apparent northeastward movement, and at 10 a. m. northeast storm warnings were ordered on the New England coast from Block Island, R. I., to Provincetown, Mass. Moderate northeast gales prevailed during the day, and at Cape Henry, Va., there was a 48-mile wind from the north. The warnings were lowered at 9 p. m.

FROST WARNINGS.

A light local frost at Sault Ste. Marie, Mich., on the morning of the 31st was not forecast.

WARNINGS FOR OTHER DISTRICTS.

Chicago, Ill., forecast district.—No frost warnings were issued during the month, except for northwest Wyoming on the 24th and for the Wisconsin cranberry marshes on the 29th.—*Charles L. Mitchell, Forecaster.*

New Orleans, La., forecast district.—During the greater part of the month the weather in this forecast district was

under the influence of areas of high pressure, which extended over the central portion of the country, or over the Gulf States, or over the Southeast. These conditions resulted in much clear weather, with an excess in temperature and a marked deficiency in precipitation in most sections. There were no storms, except local thunderstorms, and no warnings were needed or issued.—*R. A. Dyke, Forecaster.*

Denver, Colo., forecast district.—Weather conditions remained unsettled throughout the month in all parts of the district. The rainfall, generally in the form of thunderstorms, was well distributed during the first half of the month except in New Mexico and the mountainous districts of Colorado. In the latter half the thunderstorms were confined principally to the eastern Rocky Mountain slope.

No special warnings were issued.—*Frederick H. Brandenburg, Forecaster.*

San Francisco, Cal., forecast district.—July, 1918, was a month of unusual weather conditions in this district, especially in the north Pacific and plateau States, where the changes in both weather and temperature were rapid and erratic. The dominant feature was the recurrence of troughs of low pressure over the interior; first appearing over the valley of the Colorado and then extending northward over the Sierra Nevada and Cascade Mountains, causing unsettled and showery weather with numerous thunderstorms in the mountain and plateau regions.

Sometimes these troughs would merge with depressions moving southward over British Columbia and Alberta, and then move eastward near the international boundary; at other times after oscillating back and forth over the plateau for several days they would move rapidly eastward through New Mexico.

Another peculiar feature was the repeated appearance of an area of high pressure off the northern California and Oregon coasts moving rapidly inland, to be followed within 12 or 24 hours by its recession back into the ocean.

The above-described conditions were frequent during the second and third decades and caused unsettled weather and temperature changes that were difficult to forecast.

Showers and thunderstorms were frequent in the northern portion of this district and in Nevada on the 9th and 10th; and in Washington, Oregon, and northern Idaho from the 22d to the 26th, inclusive, and were beneficial to crops and ranges.

Forest fires were frequent in the first half of the month, but the rains at the beginning of the third decade brought them under control in the northern portion of the district.

There were indications on the morning of the 9th that the long drought in the north would be broken, and telegrams to that effect were sent to the forest supervisors in Washington, Eastern Oregon, Idaho, and western Montana. The telegrams read "Probably showers and thunderstorms and cooler with local gusty southwesterly winds to-night and Wednesday." The forecast was verified.

No storm warnings were issued and none were necessary.

Water is becoming very scarce for irrigation and power purposes in all sections.—*G. H. Willson, Forecaster.*